

CASE STUDY – Bagging

TASK TITLE: Bagging

Task Description:

The Bagging task may be involved when working in a deli, grocery store, convenience store or commissary. Bagging tasks involve placing scanned or checked items in plastic or paper bags. This case study does not include scanning / bar coding items with a stationary or hand-held scanner. Please see the Case Study 19 - Scanning Groceries / Tendering Money for issues concerning other aspects of checkout.

Typical jobs in which Bagging tasks are performed include (but are not necessarily limited to):

- Commissary
- Convenience store
- Restaurant

Job Performance Measures Most Often Impacted by Bagging:

Measures of job performance can include (but are not limited to):

- Time required to complete task

Typical Employee Comments about Bagging:

Employees typically experience discomfort in the back and shoulders.

The shoulder/neck and back/torso are the body areas that most commonly receive a “High” priority rating. The remaining areas, with the exception of the head/eyes, are more likely to receive a “Medium” priority rating, or lower.

Suggested Level II Analysis:

Postural Analysis, Biomechanical Lifting Analysis


Shoulder/Neck

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
1. Reaching	<ul style="list-style-type: none"> Object must be lifted over bag's edge before lowered 	150.Re-design work space <ul style="list-style-type: none"> place the bagging area directly beside the individual rather than off to one side lower the bag so that items are dropped into the bag rather than raising the item to clear the edge of the bag 	✓		low	low	med
			✓		low	low	med
2. Arm forces: Repeated arm forces or holding / carrying materials	<ul style="list-style-type: none"> Rarely occurs 	N/A					

Shoulder/Neck (cont'd)

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
3. High speed, sudden shoulder movements	<ul style="list-style-type: none"> Speed of lift 	11. Eliminate unnecessary tasks <ul style="list-style-type: none"> implement an advanced checkout system that has clients bag their own items 		✓	high	high	high
		13. Encourage ergonomic work techniques <ul style="list-style-type: none"> encourage person to use smooth fluid movements while handling items. 	✓		low	low	low
		<ul style="list-style-type: none"> encourage person to use smooth fluid movements to bring grocery items towards them 	✓		low	low	low
4. Head/neck bent or twisted	<ul style="list-style-type: none"> Rarely occurs 	N/A					

Hands/Wrists/Arms

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
5. Bent wrists/repeated wrist movements or repeated forearm rotation	<ul style="list-style-type: none"> Shape of item causes awkward wrist positions when bagging 	13. Encourage ergonomic work techniques	✓		low	low	low
		25. Increase task variety	✓		low	low	low
		20. Incorporate rest pauses	✓		low	low	low
6. Repeated manipulations with fingers	<ul style="list-style-type: none"> Rarely occurs 	N/A					
7. Hyper-extension of finger/thumb or repeated single finger activation	<ul style="list-style-type: none"> Item is difficult to grasp 	13. Encourage ergonomic work techniques	✓ ✓		low low	med low	med low
		11. Eliminate unnecessary tasks		✓	high	high	high
8. Hand/grip forces	<ul style="list-style-type: none"> Item is difficult to grasp Item has no handles 	13. Encourage ergonomic work techniques	✓		low	low	low

Hands/Wrists/Arms (cont'd)

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
9. High speed hand/wrist/arm movements or vibration, impact or torque to the hand	<ul style="list-style-type: none"> Rarely occurs 	N/A					
10. Exposure to hard edges	<ul style="list-style-type: none"> Rarely occurs 	N/A					
11. Hands and fingers exposed to cold temperatures	<ul style="list-style-type: none"> Rarely occurs - handling of frozen goods is too low to be considered an exposure 	N/A					

Back/Torso

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
12. Repeated forward or sideways bending movements	<ul style="list-style-type: none"> Object is too far away Object must be lifted over bag's edge before lowered 	38. Move closer to the work location					
		<ul style="list-style-type: none"> remove obstructions walk around the counter to handle items located in grocery carts use conveyor system to bring groceries 	✓		low	low	low
			✓		low	low	low
			✓		low	low	low
		150. Re-design work area					
13. Twisting of the lower back	<ul style="list-style-type: none"> Access is restricted to items that need to be handled 	<ul style="list-style-type: none"> place the bagging area directly beside the individual rather than off to one side lower the bag so that items are dropped into the bag rather than raising the item to clear the edge of the bag 	✓		low	low	med
			✓		low	low	med
		13. Encourage ergonomic work techniques					
		<ul style="list-style-type: none"> place the bag on its side when loading items into the bag rather than placing the bag in an upright position 	✓		low	low	low
13. Twisting of the lower back	<ul style="list-style-type: none"> Access is restricted to items that need to be handled 	150. Re-design work area					
		<ul style="list-style-type: none"> place the bagging area directly beside the individual rather than off to one side lower the bag so that items are dropped into the back rather than raising the item to clear the edge of the bag 	✓		low	low	low
			✓		low	low	med

Back/Torso (cont'd)

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
14. High speed, sudden movements, or lifting awkward, uneven, shifting or bulky items	<ul style="list-style-type: none"> Person tends to lift with a jerky motion instead of a smooth motion 	13. Encourage ergonomic work techniques <ul style="list-style-type: none"> encourage person to use smooth fluid movements while handling items 	✓		low	low	low
		11. Eliminate unnecessary tasks <ul style="list-style-type: none"> implement an advanced checkout system that has clients bag their own items 		✓	high	high	high
15. Static, awkward back postures	<ul style="list-style-type: none"> Work positioned too low 	124. Raise the work piece/work surface <ul style="list-style-type: none"> raise cash counter or grocery counter so that the items are located just below elbow height 		✓	high	med	med
16. Lifting forces	<ul style="list-style-type: none"> Item is too heavy 	142. Use two or more persons to perform the transfer	✓		low	low	low
		11. Eliminate unnecessary tasks <ul style="list-style-type: none"> implement an advanced checkout system that has clients bag their own items 		✓	low	low	low
		<ul style="list-style-type: none"> Instruct customers to leave heavy items in basket and use a hand-held scanner 	✓		low	low	med

Back/Torso (cont'd)

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
17. Pushing or pulling	<ul style="list-style-type: none"> Rarely occurs 	N/A					
18. Whole body vibration	<ul style="list-style-type: none"> Rarely occurs 	N/A					
19. Fixed position, standing	<ul style="list-style-type: none"> Stands in one position 	52. Provide a footrail or footrest <ul style="list-style-type: none"> provide a footrest/footrail that allows the person to periodically raise one leg 		✓	med	low	low

Legs/Feet

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
20. Exposure to hard edges on legs, knees, and feet <u>or</u> Standing on hard surfaces	<ul style="list-style-type: none"> Stands on a hard surface Leans against conveyor frame 	86. Provide an appropriate anti-fatigue mat		✓	med	med	med
		96. Provide appropriate shoe inserts	✓		low to med	med	med
		9. Eliminate exposure to hard edges		✓	med	low	low
		• provide high density foam padding					
21. Awkward leg postures	<ul style="list-style-type: none"> Rarely occurs 	N/A					
22. Awkward foot postures	<ul style="list-style-type: none"> Lack of toe clearance 	81. Provide adequate toe clearance		✓	med to high	low	med

Head/Eyes

Job Factor	Potential Causes	Corrective Action	Level of Changes		Cost	Impact On	
			✓ Minor Modification	✓ Major Change		Quality	Productivity
23. Difficult to see/light levels too low/too high	<ul style="list-style-type: none"> Rarely occurs 	N/A					
24. Intensive visual tasks, staring at work objects for long periods	<ul style="list-style-type: none"> Rarely occurs 	N/A					

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